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have developed a wide variety of applications including electronic image information outputs of computers and communication networks and those of digital cameras, digital videos and scanners, which in turn urge the development of functionally improved recording devices. As a result, there is a demand for ink-jet recording medium having various sophisticated functional features that can accommodate the functional improvements of the recording device.--.

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Please substitute the paragraph starting at page 2, line 17 and ending at page 3, line 2 with the following replacement paragraph. A marked-up copy of this paragraph, showing the changes made thereto, is attached.

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--When the binder of the ink-receiving layer contains polyvinyl alcohol as a principle ingredient and the lamination process is conducted immediately after an ink-jet printing operation, a swell can appear between the substrate of the ink-jet recording medium and the ink-receiving layer formed thereon while the substrate is heated. Additionally, when the heat resistant substrate is peeled off after the transfer of the transparent film layer, the ink-receiving layer can also be peeled off together with the heat resistant substrate. Therefore, there is a demand for a lamination process that is free from the above identified problems.--.

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Please substitute the paragraph starting at page 3, line 5 and ending at line 18 with the following replacement paragraph. A marked-up copy of this paragraph, showing the changes made thereto, is attached.

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--In view of the above described circumstances, it is therefore an object of the present invention to provide an ink-jet recording medium suitable for easy and excellent laminate formation and free from the problems such as swell arising between the ink-receiving layer and the substrate of the ink-jet recording medium immediately after an ink-jet printing operation, and peeling off of the ink-receiving layer at the time of peeling off a heat resistant substrate after the transfer of a transparent film layer. More specifically, an object of the present invention is to provide an ink-jet recording medium having a novel ink-receiving layer to which a transparent film layer is transferred in the lamination process without any problem.--.

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Please substitute the paragraph starting at page 3, line 19 and ending at page 4, line 13 with the following replacement paragraph. A marked-up copy of this paragraph, showing the changes made thereto, is attached.

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--As a result of the intensive research efforts for solving the above identified problems, the inventors of the present invention found that the tight contact between the ink-receiving layer and the substrate of the ink-jet recording medium

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is maintained and swells between them are prevented, when polyvinyl alcohol is used as a principal ingredient of a binder for fixing inorganic particles that are used to improve ink absorptivity, and the polyvinyl alcohol molecules are cross-linked by the heat-induced action of a cross-linking agent contained therein during the process of transferring the transparent film layer onto the ink-receiving layer after the ink-jet printing operation. The inventors of the present invention also found that both the phenomenon of swell arising between the substrate of the ink-jet recording medium and the ink-receiving layer and that of peeled-off of the ink-receiving layer arising in the operation of peeling off the heat resistant substrate that carries the transparent film layer on the surface thereof are eliminated by the use of such a binder.--.

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Please substitute the paragraph starting at page 7, line 21 and ending at page 8, line 6 with the following replacement paragraph. A marked-up copy of this paragraph, showing the changes made thereto, is attached.

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--The ink-receiving layer contains a binder whose principle ingredient is polyvinyl alcohol. Polyvinyl alcohol can suitably be used as the binder of the ink-receiving layer from the viewpoint of ink absorptivity and economy because it can be purchased at low cost. Polyvinyl alcohol can be obtained by saponifying the ester thereof that has been synthetically produced. For the purpose of the invention, polyvinyl alcohol

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having a saponification degree of 78% to 89% can most suitably be used for the ink-receiving layer. The binder of the ink-receiving layer may contain urethane or the like. Preferably, the ink-receiving layer contains not less than 30 weight % of polyvinyl alcohol.--.

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Please substitute the paragraph starting at page 10, line 5 and ending at line 21 with the following replacement paragraph. A marked-up copy of this paragraph, showing the changes made thereto, is attached.

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--Various additives such as dispersants, fluorescent dyes, pH adjusters, lubricants and surfactants that can be added to the ink-receiving layer of conventional recording mediums may also be appropriately and selectively added to the ink-receiving layer of an ink-jet recording medium according to the invention whenever necessary. In view of the fact that the ink-receiving layer of an ink-jet recording medium according to the invention contains porous inorganic particles and various additives, the polyvinyl alcohol content of the ink-receiving layer is preferably not higher than 70 weight %, more preferably not higher than 50 weight %. In other words, the content of inorganic porous particles and that of various additives need to be so selected that the polyvinyl alcohol content of the ink-receiving layer is found to be between 30 and 70 weight %, preferably between 35 and 50 weight %.--.

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Please substitute the paragraph starting at page 11, line 6 and ending at line 21 with the following replacement paragraph. A marked-up copy of this paragraph, showing the changes made thereto, is attached.

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--According to the invention, a cross-linking agent is added to the ink-receiving layer in order to cross-link polymer molecules of polyvinyl alcohol that are used as a binder after an ink-jet printing operation. Preferably, a compound that reacts with hydroxy groups of polyvinyl alcohol in a heated condition to cross-link polymer molecules of polyvinyl alcohol is used as the cross-link agent. Preferable compounds as cross-linking agents for the purpose of the invention include isocyanate compounds and epoxy compounds. By using such cross-linking agent, polymer molecules of polyvinyl alcohol are cross-linked to prevent any swell between the ink-receiving layer and the substrate during the process of laminating a transparent film while applying heat.--.

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Please substitute the paragraph starting at page 13, line 5 and ending at line 15 with the following replacement paragraph. A marked-up copy of this paragraph, showing the changes made thereto, is attached.

B 8

-- A disperse liquid used for forming the ink-receiving layer is prepared by adding a cross-linking agent to polyvinyl alcohol in a predetermined proportion along with porous inorganic particles such as silica particles and other additives, and